

Amendments to the Specification:

In the Background of the Invention, on page 1 line 4, please insert the following:

This application is a continuation of US Application 09/699,852 filed October 30, 2000, which is a continuation of US Application Serial No. 08/823,824 filed on March 25, 1997, now US Patent 6,141,096, which is a continuation of US Application Serial No. 08/195,889, filed on February 10, 1994, now U.S. Patent 5,631,734, all of which are incorporated by reference.

In the Brief Description of the Drawings, on page 4, lines 1-19, please replace the description on lines 1 – 19 with the following:

FIG. 1b shows an alternative embodiment of a detection system for locating fluorescent markers on the substrate;

FIG. 1c shows another embodiment of a detection system for locating fluorescent markers on the substrate;

FIG. 2 is a flow chart illustrating the operation of the detection system;

FIGS. 3a and 3b are [[3 is]] another flow chart illustrating the focusing step of the detection system;

FIGS. 4a and 4b are [[4a is]] another flow chart illustrating the data acquisition step of the detection system;

FIG. 4c [[4b]] shows the relationship among the counters in the data acquisition board versus time[.];

FIG. 5 is another flow chart illustrating the method of converting data representing photon counts as a function of position to data representing fluorescence intensity level as a function of position; and

FIGS. 6a and 6b are [[6 is]] another flow chart illustrating the data analysis step.